

Claims

1. ~~Process for reducing plant availability of heavy metals in substrates, characterized in that the substrates are treated with cross-linked polyacrylates or polymethacrylates.~~

2. Process according to Claim 1, characterized in that the substrates are treated by means of mixing.

3. Process according to Claim 2, characterized in that in mixing, the amount of additive is 0.1 to 2.5% by weight.

4. Process according to Claim 3, characterized in that in mixing, the amount of additive is 0.5 to 2.0% by weight.

5. Process according to Claim 1, characterized in that the cross-linked poly(meth)acrylates are produced by using monoethylenically unsaturated monocarboxylic acids, in particular acrylic acid or its salts.

6. Process according to Claim 5, characterized in that the poly(meth)acrylates are produced by using other monoethylenically unsaturated monomers containing no carboxylate groups, in particular by using acrylamide.

7. Process according to Claims 5 or 6, characterized in that the poly(meth)acrylates are obtained by using methylenbis(meth)acrylamide, ethylenbis(meth)acrylamide, N-methylolacrylamide or triallylamin as cross-linking agents, whereby methylenbisacrylamide is preferred.

8. Process according to one or more of Claims 5 to 7, characterized in that the poly(meth)acrylates are treated with a subsequent cross-linking agent in quantities of 0.01 to 10% by weight, at an increased temperature, preferably between 80 and 250° C.

9. Process according to one or more of Claims 5 to 8, characterized in that the acidic monomer components of the poly(meth)acrylate are neutralized between 10 and 95 mol percent, preferably between 50 and 90 mol percent.

10. Process according to one or more of Claims 5 to 9, characterized in that the poly(meth)acrylates have an absorption capacity for synthetic soil solution of more than 30 g/g, preferably more than 50 g/g, and especially more than 65 g/g.

11. Process according to one or more of Claims 5 to 10, characterized in that the poly(meth)acrylates are worked into the acid soil up to a depth of about 50 cm.

12. ~~Use of cross-linked poly(meth)acrylates to reduce plant~~